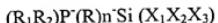


**WHAT IS CLAIMED IS:**

1. (Original) A material for forming copper undercoat films, characterized by comprising the compound represented by general formula (1) below:

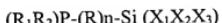
General formula (I)



(In general formula 1, at least one of X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub> is a hydrolytic group, R<sub>1</sub> and R<sub>2</sub> are alkyl groups, R denotes a chain-form organic group formed from alkyl groups, aromatic rings or alkyl groups containing aromatic rings, and n is an integer from 1 to 6.)

2. (Original) A material for forming copper undercoat films, characterized by comprising compound represented by general formula (1) below:

General formula (I)



(In general formula 1, at least one of X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub> is selected from a group comprising halogens, alkoxide groups, amino groups and isocyanate groups, R<sub>1</sub> and R<sub>2</sub> are alkyl groups with carbon numbers of 1-21, R has a carbon number of 1-50, and denotes a chain-form organic group formed from alkyl groups, aromatic rings or alkyl groups containing aromatic rings, and n is an integer from 1 to 6.)

3. (Original) The material for forming copper undercoat films according to claim 1 or 2, characterized by being a material for forming copper undercoat films by virtue of the bonding of (R<sub>1</sub>R<sub>2</sub>)P-(R)n-Si groups to a substrate via Si-O bonding, and by comprising solvent and the compound represented by general formula (I).

4. (Original) The material for forming copper undercoat films according to any of claims 1-3, characterized in that the compound represented by general formula (I) is one or more substances selected from the group: 1-dimethylphosphino-2-trethoxysilylethane, 1-diethylphosphino-2-triethoxysilylethane, 1-diphenylphosphino-2-triethoxysilylethane, 1-dimethylphosphino-2-trimethoxysilylethane, 1-diethylphosphino-2trimethoxysilylethane, 1-diphenylphosphino-2-trimethoxysilylethane, 1-dimethylphosphino-3triethoxysilylpropane, 1-diethylphosphino-3-triethoxysilylpropane, 1-diphenylphosphino-3-triethoxysilylpropane, 1-diphenylphosphino-2-trichlorosilylethane, 1-diphenylphosphino-2trisdimethylaminosilylethane, 1-diphenylphosphino-2-triisocyanatosilylethane and 1-diphenylphosphino-4-triethoxysilylethylbenzene.

5. (Original) The material for forming copper undercoat films according to any of claims 1-4, characterized in that the material for forming copper undercoat films is brought into contact with a substrate surface, thus forming a copper undercoat film.

6. (Original) The material for forming copper undercoat films according to any of claims 1-5, wherein the undercoat film is produced by the bonding of  $(R_1R_2)P-(R)_n-Si$  groups to the substrate via Si-O bonding, and said undercoat film is [designed so that] the reaction between the  $-Si(X_1X_2X_3)$  [groups] and  $-OH$  [groups] at the substrate surface occurs in liquid phase.

7. (Original) The material for forming copper undercoat films according to any of claims 1-5, wherein the undercoat film is produced by the bonding of  $(R_1R_2)P-(R)_n-Si$  groups to the

substrate via Si-O bonding, and said undercoat film is [designed so that] the reaction between the  $-Si(X_1X_2X_3)$  [groups] and  $-OH$  [groups] at the substrate surface occurs in gas phase.

8. (Original) The material for forming copper undercoat films according to any of claims 1-5, wherein the undercoat film is produced by the bonding of  $(R_1R_2)-(R)_n-Si$  groups to the substrate via Si-O bonding, and said undercoat film is [designed so that] the reaction between the  $-Si(X_1X_2X_3)$  [groups] and  $-OH$  [groups] at the substrate surface occurs in a supercritical liquid.

9. (Original) The material for forming copper undercoat films according to any of claims 1-8, characterized in that the reaction between the  $-Si(X_1X_2X_3)$  [groups] and  $-OH$  [groups] at the substrate surface is carried out under the condition of room temperature to  $450^{\circ}C$ .

(Detailed description of the invention)

(Technological field of the invention)

The present invention relates to a material for forming copper undercoat films.

(Problem to be solved by the invention)